

Subject: Science	KS3	KS4
<p>Aims of the Curriculum:</p>	<p>In Year 7 students receive a grounding in Investigative Science and complete units in each of the three strands of Science which cover a range of subjects and skills. The units are purposely broad to capture students interest surrounding concepts from Biology, Chemistry and Physics. Throughout year 7 students will carry out practical work in the context of each topic and develop their knowledge and understanding to: pose scientific questions, define scientific problems, plan and carry out investigative activities.</p> <p>In Year 8 and 9 students further deepen their knowledge and skills in Science through a variety of topics, which cover a range of subjects and skills to enable them to gather, process and evaluate the relevant information for them to succeed in Entry Level Science.</p> <p>The Key Stage 3 curriculum is designed to allow students to develop an interest and appreciation for the natural world around us; an understanding of current and past environmental issues including the use of different fuels and the need to protect and preserve the range of fauna and flora; an understanding of how the body works and how to keep it healthy; an appreciation and understanding of the different materials we have used in the past and how these have been developed to what we use today; an understanding of different types of energy and forces and how these impact our lives and a practical understanding of how electricity and magnets work and how these affect our lives.</p>	<p>All students follow either the AQA GCSE Biology (on occasion, students undertake an additional strand, Chemistry or Physics) or AQA Science Entry Level Certificate. The pathway students follow depends on attainment during Key Stage Three, the course undertaken is discussed with students, parents, and staff to ensure it is in the best interest of each individual student.</p> <p>All students in Year 10 and 11 will develop their knowledge and skills from Key Stage Three and consolidate their skills in planning and evaluating investigations. Whilst completing specific topics, students conduct several required practical experiments. Practical science remains at the heart of our Science teaching and forms an integral part of the course. Keeping Science as real as possible for our students ensures they will be best prepared for understanding scientific concepts in their everyday life.</p>
<p>Skills and Attributes:</p>	<p>In a range of contexts, students will:</p> <ul style="list-style-type: none"> • collect, analyse and interpret data to provide evidence and evaluate their methodology and data to support students with the academic demands of Science. • Ask questions to challenge scientific phenomena. • Make scientific predications and evaluate these predications. • Setting up scientific equipment to test their predictions. • Observe scientific concepts in action. 	<p>Throughout the course students will carry out practical work in the context of each section and further develop their knowledge and understanding from Key Stage Three to:</p> <ul style="list-style-type: none"> • Pose scientific questions. • Define scientific problems. • Design and carry out investigative activities to ensure they are reliable and repeatable. • Challenge scientific method and to improve this where appropriate. • Highlighting and adhering to the steps of working aseptically.

**Meeting our Students'
Needs:**

Ensuring students have comprehensive verbal and written skills to communicate the desired scientific terminology effectively, this is vital in our setting where students often experience complex communication and social difficulties.

Practical Science is at the heart of our whole ethos at Corley Centre. Students are supported and encouraged to develop their communication skills through teamwork when planning, conducting, and analysing practical experiments.

Class discussion underpins much of the Science curriculum and we encourage our students to express their ideas whilst learning to appreciate and respect the views of others. In Science, students are encouraged to expand their thinking and support their discussion point on scientific fact.

Lessons remain in a consistent format, so students know what to expect to lower anxiety levels, and when practical experiments are going to be undertaken, students are warned prior to the lesson and supported, where required, by demonstrations, visual cues, and physical assistance.